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ABSTRACT

A computerized delivery system in consumer economics developed at the University of Delaware uses the PLATO system to provide a basis for analyzing consumer behavior in the marketplace. The 16 sequential lessons, part of the Consumer in the Marketplace Series (CMS), demonstrate consumer economic theory in layman's terms and are structured to focus on the cognitive behaviors of knowledge, comprehension, applications, analysis, synthesis, and evaluation, based on Bruner's theory of instruction. The model merges the content of consumer economics and the methodology emphasized in computer education into a "life-adjustment" agenda. The resulting conceptual approach provides a mechanism for serving a varied audience of college students, teachers with consumer education responsibilities, or interested adults without significantly expanding resources, while increasing the economics awareness levels of students and faculties in other disciplines. The CMS is divided into four segments focusing on the analysis of rational behavior in the marketplace and wise decision-making, increasing individual earning power, increasing consumer spending power, and the political and legal framework of society. Four references are listed. (LMM)

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THE DEVELOPMENT OF A DISTRIBUTIVE INTERACTIVE COMPUTING MODEL IN CONSUMER ECONOMICS, UTILIZING JEROME S. BRUNER'S THEORY OF INSTRUCTION

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THE DEVELOPMENT OF A DISTRIBUTIVE INTERACTIVE COMPUTING MODEL IN CONSUMER ECONOMICS, UTILIZING JEROME S. BRUNER'S THEORY OF INSTRUCTION

A computerized delivery system in consumer economics based upon Jerome S. Bruner's Theory of Instruction has been initiated at the University of Delaware. Fundamental to the consumer learning model is the sequential presentation of 16 lessons demonstrating consumer economic theory in layman's terms. The 16 lessons are part of The Consumer in the Marketplace Series (CMS) and are structured to permit program activities to focus upon six cognitive behaviors: knowledge, comprehension, applications, analysis, synthesis, and evaluation.

The model merges the content of consumer economics and the methodology emphasized in consumer education into a "life-adjustment" agenda which is delivered by means of a mainframe computer (Control Data Corporation CYBER 173 series) which is part of the University's PLATO System housed in the Office of Computer-Based Instruction. Resulting from the merger is a conceptual approach to consumer economics/education which provides a mechanism for delivering computerized consumer-oriented lessons to three target groups: (1) students enrolled in a basic consumer economics course at the Collegiate level; (2) teachers who are either in the process of having consumer education responsibilities at a variety of levels of education (elementary, secondary, or post-secondary) or those who may be in the process of preparing for careers in teaching; and (3) adults who are not actively involved in a formal educational process but who are interested in improving their consumer

skills.

The model adopted for presenting concepts in consumer economics/education is an attempt to respond to three primary concerns; (1) to make the basic course in consumer economics available to more students without significantly expanding resources; (2) to merge "hard-core" consumer economic theory with the methodology (how-to-buy) of consumer education programs to serve a variety of audiences (teachers, adults, consumer economic majors, etc.); and (3) to increase the awareness level of students (and faculty in other disciplines) as to the importance of attaining "spending competencies."

While completing four-year Baccalaureate degree educational programs, the basic assumption adopted for designing the model is that a Collegiate program must provide students with two kinds of learning: one set of experiences to prepare the individual to enter into the world of work as a productive citizen; and second, to prepare that same individual to increase his/her spending power. The premise here is that teaching students only how to earn money but failing to provide any assistance on how to spend it is giving "half a program."

Finally, the consumer learning model also provides a mechanism for preparing individuals to assume an "advocacy" role in the marketplace. This advocacy can only become a reality if wage earners understand the effects individual purchases have upon the family, community, and nation. It is vital for

consumers today to understand how individual voices may be heard so they can contribute in forming the kind of marketplace in which they would like to live. Therefore, the model adopted is an attempt to increase the audience of consumer economics/education programs and to "enlighten" other academicians as to the importance of this discipline to producing a well-rounded, productive citizen.

FRAMEWORK OF MODEL

The framework for the model developed was derived from the writings of Jerome S. Bruner. The three publications which provided a frame of reference for establishing an independent instructional program were Process of Education, Toward A Theory of Instruction, and On Knowing; Essay for the Left Hand. (A listing of other writings which were useful in model formation are provided in the reference section of this paper.) Upon analyzing these writings, the following four components (or what Bruner identifies as "constructs") reflecting the "core" of Bruner's Instructional Theory were incorporated into the instructional model: (1) process of education; (2) structure of knowledge; (3) optimal sequence; and (4) reinforcement.

1. Process of Education. Basic to Bruner's Theory is an emphasis upon the "process" rather than the "product of learning" and the promotion of both analytical and intuitive thought on the part of the student. The consumer learning model emphasizes the utilization of problem-solving techniques resulting in the

student analyzing his or her own behavior in the marketplace as decisions are made. Therefore, the emphasis is upon having students analyze a variety of strategies for making choices in the marketplace -- that is, applying concepts to one's own behavior in the marketplace.

2. Structure of Knowledge. Another important "construct" to Bruner's Theory is that of providing the learner with appropriate knowledge which is to be used as a foundation for the later development of other advanced cognitive behaviors. In the consumer learning model developed, each lesson focuses upon one concept. The feedback capabilities intrinsic to computing systems permits frequent verifying of student's knowledge acquisition as progress is made through each lesson. The interactive capabilities of computers via remote terminals provide excellent opportunities for communicating with students to ensure basic knowledge is comprehended and can be applied to realistic situations.

3. Optimal Sequence. A third "construct" of significance to Bruner's Theory is that of providing the student with an appropriate sequence of learning activities progressing from the specific (or practical experiences) to the more abstract (or advanced cognitive learning behavior). The consumer learning model utilizes a case-study format which requires the student to apply basic knowledge learned to specific problems in the marketplace. The learner is provided with the "particulars" of a problem and then required to implement a strategy

for arriving at a decision.

4. Reinforcement. Bruner's Theory also views reinforcement as an important element to instruction. The consumer learning model incorporates both extrinsic and intrinsic rewards as the student advances through learning activities. Each student receives credit in the form of "performance points" upon completing each lesson successfully. In addition, during casework, students are requested to solve problems relating to their own experience in the marketplace, thus providing self-motivation for perceiving how consumer economics theory relates to their own actions.

Each lesson in the consumer series consists of a pretest, lesson placement, program delivery, and posttest. The user of each lesson is requested to apply a concept to specific content areas such as housing, health care, credit, etc.--and to be able to determine the consequences of proposed actions. Each lesson has been designed to enable users to complete activities in 30 to 45 minutes. Lessons are structured into three to four segments permitting students to review parts of a lesson upon demand. A variety of consumer models which are used as a basis for analyzing consumer behavior in the marketplace are illustrated throughout the Consumer in the Marketplace Series. In addition, lessons often request students to compare their own decisions with those reflected in the conceptual model presented.

CONSUMER MODEL DESIGN

The Consumer in the Marketplace Series (CMS) is divided into four segments with each focusing upon a specific theme (See Table I). The first segment relates to analyzing RATIONAL BEHAVIOR in the marketplace, specifically identifying those factors which must be present in order to make wise decisions (e.g., information, power, certainty, organization, etc.) The initial lesson in this segment describes the act of consumption in terms of how choices are made by the consumer. The following lesson emphasizes a variety of mechanisms available to the consumer to accumulate useful information needed for making an informed decision. The concept of sovereignty is then examined in terms of allocating resources of the consumer (time, energy, and money) to get maximum satisfaction from expenditures. Indexing is studied as a mechanism for determining trends in the marketplace. Primary attention is focused upon the strengths and weaknesses of the Consumer Price Index as a measure of market activity. The concept of time-probability is then analyzed in terms of how consumer expectations (perception of the future) affect today's planning and expenditures in the marketplace. The first group of lessons conclude with the study of the concept of rationality which focuses upon the organization of consumer activities into a disciplined agenda for carrying out a decision.

The second cluster of lessons provide students with activities focusing upon consumer skills relating to INCREASING INDIVIDUAL EARNING POWER. The concept of investment-in-human capital pinpoints the students' attention upon the importanc of occupational choice and meeting job requirements (e.g. specifically training opportunities). The following lesson on opportunity costs examines the changing roles of the male and female in family units. Finally, the concluding lesson in this segment describes the concept of optimal consumption stream which focuses attention upon the necessity of protecting earnings and maintaining a continuous stream of income during difficult times -- such as unemployment, severe illness, or other catastrophies which may occur during an individual's lifetime.

Segment III concentrates upon activities which may assist the consumer in INCREASING HIS/HER SPENDING POWER. The concept, transfer of income, describes the importance of managing credit while making purchases in the marketplace. Product liability is studied in terms of consumer safety issues. Specific emphasis is upon purchasing consumer durables (e.g. kitchen appliances, stereos, etc.) and the warranties which accompany many of these purchases. The next lesson in the Series identifies the existence of a consumer system by breaking down the marketing of goods and services into inputs, throughputs, and outputs. Examples used in the lesson relate to transportation and health care systems. Product attributes/consequences are

compared utilizing examples associated with consumption patterns related to housing and clothing. The last but most important topic discussed in this segment is that of transfer payments. The lesson focuses upon taxes, government expenditures, and their impact upon the consumer.

The final segment in the CMS Series examines the political and legal framework within which an individual must function in our society. The computer lesson on public policy presents the complexities associated with government regulation of the marketplace. An analysis of how food is delivered to the marketplace -- and its cost is made. Finally, the Series concludes with an examination of consumer rights in the marketplace. Specific steps which may be taken by the consumer when seeking redress are identified and discussed.

CONCLUDING REMARKS

Utilizing Jerome S. Bruner's Instructional Theory as a basis for program development, the Consumer in the Marketplace Series reflects a "life-adjustment educational approach" for learning how to maximize satisfaction from spending one's income. The approach results in the merging of traditional consumer economics theory with basic consumer education methodology for meeting the needs of a variety of individuals. The models presented throughout the series of lessons serve as a basis for analyzing consumer behavior in the marketplace. The

feedback capabilities of the computer enables students to be monitored as lesson activities are performed to assure that a solid foundation is developed before advanced knowledge is acquired. In order to give definition and purpose to consumer economics, topics are sequenced as to optimize the learning experiences of students.

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